# Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate Technical Specifications

Prevention Quality Indicators #5 (PQI #5)
AHRQ Quality Indicators™, Version 5.0
March 2015
Area-Level Indicator
Type of Score: Rate

# **Description**

Admissions with a principal diagnosis of chronic obstructive pulmonary disease (COPD) or asthma per 100,000 population, ages 40 years and older. Excludes obstetric admissions and transfers from other institutions.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.]

# **Numerator**

Discharges, for patients ages 40 years and older, with either

- a principal ICD-9-CM diagnosis code for COPD (excluding acute bronchitis); or
- a principal ICD-9-CM diagnosis code for asthma; or
- a principal ICD-9-CM diagnosis code for acute bronchitis and any secondary ICD-9-CM diagnosis codes for COPD (excluding acute bronchitis).

[NOTE: By definition, discharges with a principal diagnosis of COPD, asthma, or acute bronchitis are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI<sup>TM</sup> software does not explicitly exclude obstetric cases.]

### ICD-9-CM COPD (excluding acute bronchitis) diagnosis codes:

49	910	SIMPLE CHR BRONCHITIS	4920	EMPHYSEMATOUS BLEB
49	911	MUCOPURUL CHR BRONCHITIS	4928	EMPHYSEMA NEC
49	9120	OBS CHR BRNC W/O ACT EXA	494	BRONCHIECTASIS
49	9121	OBS CHR BRNC W ACT EXA	4940	BRONCHIECTAS W/O AC EXAC
49	9122	OBS CHR BRONC W AC BRONC	4941	BRONCHIECTASIS W AC EXAC
49	918	CHRONIC BRONCHITIS NEC	496	CHR AIRWAY OBSTRUCT NEC
49	919	CHRONIC BRONCHITIS NOS		

## ICD-9-CM Asthma diagnosis codes:

49300	EXT ASTHMA W/O STAT ASTH	49321	CH OB ASTHMA W STAT ASTH
49301	EXT ASTHMA W STATUS ASTH	49322	CH OBS ASTH W ACUTE EXAC
49302	EXT ASTHMA W ACUTE EXAC	49381	EXERCSE IND BRONCHOSPASM
49310	INT ASTHMA W/O STAT ASTH	49382	COUGH VARIANT ASTHMA
49311	INT ASTHMA W STATUS ASTH	49390	ASTHMA W/O STATUS ASTHM
49312	INT ASTHMA W ACUTE EXAC	49391	ASTHMA W STATUS ASTHMAT
49320	CH OB ASTH W/O STAT ASTH	49392	ASTHMA W ACUTE EXACERBTN

### **ICD-9-CM** Acute bronchitis diagnosis codes:

4660 ACUTE BRONCHITIS 490 BRONCHITIS NOS

### Exclude cases:

- with any-listed ICD-9-CM diagnosis codes for cystic fibrosis and anomalies of the respiratory system
- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

See Prevention Quality Indicators Appendices:

• Appendix A – Admission Codes for Transfers

### ICD-9-CM Cystic fibrosis and anomalies of the respiratory system diagnosis codes:

27700	CYSTIC FIBROS W/O ILEUS	7483	LARYNGOTRACH ANOMALY NEC
27701	CYSTIC FIBROS W ILEUS	7484	CONGENITAL CYSTIC LUNG
27702	CYSTIC FIBROS W PUL MAN	7485	AGENESIS OF LUNG
27703	CYSTIC FIBROSIS W GI MAN	74860	LUNG ANOMALY NOS
27709	CYSTIC FIBROSIS NEC	74861	CONGEN BRONCHIECTASIS
51661	NEUROENDOCRINE CELL	74869	LUNG ANOMALY NEC
	HYPERPLASIA OF INFANCY		
51662	PULMONARY INTERSTITIAL	7488	RESPIRATORY ANOMALY NEC
	GLYCOGENESIS		
51663	SURFACTANT MUTATIONS OF THE	7489	RESPIRATORY ANOMALY NOS
	LUNG		
51664	ALVEOLAR CAPILLARY DYSPLASIA	7503	CONG ESOPH FISTULA/ATRES
	WITH VEIN MISALIGNMENT		
51669	OTHER INTERSTITIAL LUNG DISEASES	7593	SITUS INVERSUS
	OF THE CHILDHOOD		
74721	ANOMALIES OF AORTIC ARCH	7707	PERINATAL CHR RESP DIS

# **Denominator**

Population ages 40 years and older in metropolitan area<sup>†</sup> or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

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<sup>&</sup>lt;sup>†</sup> The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs) and primary metropolitan statistical areas (PMSAs). In addition, "area" could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.